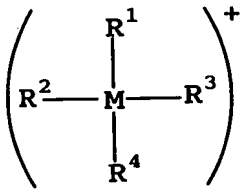
CLAIMES

1. An aromatic polycarbonate resin composition comprising:

(A) an aromatic polycarbonate (component A)

(B) a layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and ion-exchanged by an organic onium ion represented by the following general formula (I):



...(I)

(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other), the content of the component B being 0.1 to 20 parts by weight based on 100 parts by weight of the component A,

(C) a compound (component C) having an affinity for the aromatic polycarbonate (component A) and having a hydrophilic component, the content of the component C being 0.1 to 50 parts by weight based on 100 parts by weight of the component A, and

(D) a partial ester and/or a full ester (component D) of a higher fatty acid and a polyhydric alcohol, the component D being 0.005 to 1 part by weight based on 100 parts by weight of the component A.

2. The composition of claim 1, wherein R^1 and R^2 in the general formula (I) relating to the component B are an alkyl group having 8 to 11 carbon atoms.

3. The composition of claim 1, wherein R^3 and R^4 in the general formula (I) relating to the component B are a methyl group or an ethyl group.

4. The composition of claim 1, wherein M in the general formula (I) relating to the component B is a nitrogen atom.

5. The composition of claim 1, wherein the component C is a polymer having an affinity for the aromatic polycarbonate (component A) and having a functional group comprising a carboxyl group and/or a derivative thereof.

6. The composition of claim 5, wherein the component C is a styrene-containing polymer (component C-1) having a functional group comprising a carboxyl group and/or a derivative thereof.

7. The composition of claim 6, wherein the component C-1 is a styrene-maleic anhydride copolymer.

8. The composition of claim 1, wherein the higher fatty acid of the component D is an aliphatic carboxylic acid having 10 to 32 carbon atoms, and the polyhydric alcohol is an aliphatic alcohol having 3 to 32 carbon atoms.

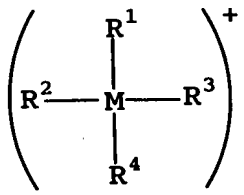
9. The composition of claim 1, wherein the component D is a partial ester of a higher fatty acid and a polyhydric alcohol.

10. An aromatic polycarbonate resin composition comprising:

(A) an aromatic polycarbonate (component A)

(B) a layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and

ion-exchanged by an organic onium ion represented by the following general formula (I):



...(I)

(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other), the content of the component B being 0.1 to 20 parts by weight based on 100 parts by weight of the component A, and

(C) a compound (component C) having an affinity for the aromatic polycarbonate (component A) and having a hydrophilic component, the content of the component C being 0.1 to 50 parts by weight based on 100 parts by weight of the component A.

11. The composition of claim 10, wherein R^1 and R^2 in the general formula (I) relating to the component B are an alkyl group having 8 to 11 carbon atoms.

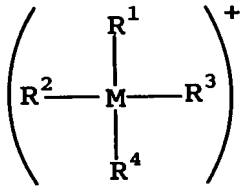
12. The composition of claim 10, wherein the component C is a polymer having an affinity for the aromatic polycarbonate (component A) and having a functional group comprising a carboxyl group and/or a derivative thereof.

13. The composition of claim 12, wherein the component C is a styrene-containing polymer (component C-1) having a functional group comprising a carboxyl group and/or a derivative thereof.

14. The composition of claim 13, wherein the component

C-1 is a styrene-maleic anhydride copolymer.

15. A method for producing an aromatic polycarbonate resin composition by mixing (A) 100 parts by weight of aromatic polycarbonate (component A) with (B) 0.1 to 20 parts by weight of layer silicate ion-exchanged by an organic onium ion,
wherein as the layer silicate, a layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and ion-exchanged by an organic onium ion represented by the following general formula (I):



...(I)

(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other), is used so as to improve hydrolysis resistance.

16. The method of claim 15, wherein R^1 and R^2 in the general formula (I) relating to the component B are an alkyl group having 7 to 14 carbon atoms.

17. The method of claim 15, wherein the aromatic polycarbonate resin composition is produced by further mixing (C) a compound (component C) having an affinity for the aromatic polycarbonate (component A) and having a hydrophilic component in an amount of 0.1 to 50 parts by weight based on 100 parts by weight of the component A.

18. The method of claim 15, wherein the mixing is

melt-kneading.

19. The method of claim 17, wherein the component C is a polymer having an affinity for the aromatic polycarbonate (component A) and having a functional group comprising a carboxyl group and/or a derivative thereof.

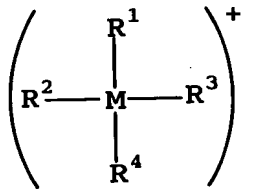
20. The method of claim 19, wherein the component C is a styrene-containing polymer (component C-1) having a functional group comprising a carboxyl group and/or a derivative thereof.

21. The method of claim 20, wherein the component C-1 is a styrene-maleic anhydride copolymer.

22. The method of claim 17, wherein the component B and the component C are melt-kneaded in advance so as to obtain a melt-kneaded mixture which is then melt-kneaded with the component A.

23. The method of claim 15, wherein the aromatic polycarbonate resin composition is produced by further mixing (D) a partial ester and/or a full ester (component D) of a higher fatty acid and a polyhydric alcohol in an amount of 0.005 to 1 part by weight based on 100 parts by weight of the component A.

24. Use of a layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and ion-exchanged by an organic onium ion represented by the following general formula (I):



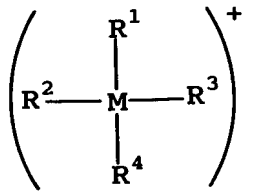
...(I)

(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other), in an aromatic polycarbonate resin composition comprising (A) 100 parts by weight of aromatic polycarbonate (component A) and (B) 0.1 to 20 parts by weight of layer silicate ion-exchanged by an organic onium ion, to prevent deterioration in hydrolysis resistance and to impart rigidity.

25. Use of the layer silicate (component B) of claim 24, wherein the aromatic polycarbonate resin composition further comprises (C) a compound (component C) having an affinity for the aromatic polycarbonate (component A) and having a hydrophilic component in an amount of 0.1 to 50 parts by weight based on 100 parts by weight of the component A.

26. Use of the layer silicate (component B) of claim 24, wherein the aromatic polycarbonate resin composition is produced by further mixing (D) a partial ester and/or a full ester (component D) of a higher fatty acid and a polyhydric alcohol in an amount of 0.005 to 1 part by weight based on 100 parts by weight of the component A.

27. Use of a layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and ion-exchanged by an organic onium ion represented by the following general formula (I):



...(I)

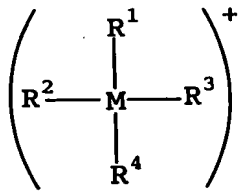
(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other), for producing an aromatic polycarbonate resin composition which comprises (A) 100 parts by weight of aromatic polycarbonate (component A) and (B) 0.1 to 20 parts by weight of layer silicate ion-exchanged by an organic onium ion and which has improved hydrolysis resistance.

28. Use of the layer silicate of claim 27, wherein the aromatic polycarbonate resin composition further comprises (C) a compound (component C) having an affinity for the aromatic polycarbonate (component A) and having a hydrophilic component in an amount of 0.1 to 50 parts by weight based on 100 parts by weight of the component A.

29. Use of the layer silicate of claim 27, wherein the aromatic polycarbonate resin composition is produced by further mixing (D) a partial ester and/or a full ester (component D) of a higher fatty acid and a polyhydric alcohol in an amount of 0.005 to 1 part by weight based on 100 parts by weight of the component A.

30. An additive for improving the physical properties of an aromatic polycarbonate resin, the additive comprising (C) 100 parts by weight of compound (component C) having an affinity for an aromatic polycarbonate (component A) and having a hydrophilic component and (B) 1 to 300 parts by weight

of layer silicate (component B) having 50 to 200 milliequivalents/100 g of cation exchange capacity and ion-exchanged by an organic onium ion represented by the following general formula (I):



...(I)

(wherein M represents a nitrogen atom or a phosphorus atom, R^1 and R^2 represent an alkyl group having 6 to 16 carbon atoms and may be the same as or different from each other, and R^3 and R^4 represent an alkyl group having 1 to 4 carbon atoms and may be the same as or different from each other).

31. A molded article produced by injection-molding the aromatic polycarbonate resin composition of claim 1 or 10.